| <br> | Claims |  |
|------|--------|--|
|      |        |  |

| Appl | ication | /Control | No. |
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10/099,781

Examiner

Camie S. Thompson

Applicant(s)/Patent under Reexamination

KIM ET AL.

Art Unit

1774

| √ | Rejected |
|---|----------|
| = | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| Z | Non-Elected  |
|---|--------------|
|   | Interference |

| Α | Appeal   |
|---|----------|
| 0 | Objected |

| Cla      | aim      |                |          |           | Date   | e  |                 |                |           | Cla      | im       |          |          |          | D        | ate      |          |          |        |        |          | laim     | I         |  |  |  | Date     | •        |                |          |          |
|----------|----------|----------------|----------|-----------|--|--|-----------------|----------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------|--------|----------|----------|-----------|--|--|--|----------|----------|----------------|----------|----------|
|          | ٦        | 101            |          |           | T  |  |                 | T              |           |          | ᆈ        |          |          |          |          |          |          |          |        |        |          | <u></u>  |           |  |  |  |          |          |                |          |          |
| Final    | Original | N              |          |           | 1  | ľ  |                 |                |           | Final    | Original |          |          | - 1      |          |          |          |          |        |        | Final    | Original |           |  |  |  |          |          |                |          | - 1      |
| ιĒ       | Ę.       | 3              | `        |           | 1  |  |                 |                |           | ᄩ        | řig      |          | ı        |          |          |          |          |          |        |        | ਛੋ       | l Ĕ,     |           |  |  |  |          |          |                | -        |          |
|          | 0        | 1              |          |           |  |  |                 |                |           |          | U        |          |          |          |          |          |          | ı        |        |        |          | 0        |           |  |  |  |          |          |                |          |          |
| 1        | 1        | 3              |          | 1         | 1  |  |                 |                |           |          | 51       |          |          |          | T        |          | T        |          |        | 7      |          | 101      | T         |  |  |  |          |          | T              | $\neg$   |          |
| 2        | 2        | 1111           |          | $\neg$    | 1  | T  |                 | $\neg$         |           |          | 52       | П        |          | T        | T        | T        | T        |          | 1      | 7      |          | 102      |           |  |  |  | П        |          |                | ヿ        | П        |
| 3        | 3        | 3              | _        | _         | 1  | $\vdash$   | $\Box$          | $\neg$         | $\neg$    |          | 53       | П        | $\neg$   | 寸        | 7        | 7        | 7        |          | 1      | ۱      | $\Box$   | 103      |           | T  |  |  | П        |          | 寸              | $\dashv$ | ٦        |
| 4        | 4        | 3              | $\neg$   | 十         | 1  | T  |                 | 寸              |           |          | 54       | П        | $\neg$   |          | T        | _        | $\top$   | _        | $\top$ | 7      | $\vdash$ | 104      |           | T  | Г  | Г  | П        |          | $\neg$         | 寸        | T        |
| 5        | 5        | 11/1/11        |          | $\top$    | $\top$   | T  |                 | $\neg$         | _         |          | 55       | П        | $\neg$   | ┪        | T        | _        | $\top$   | 十        | T      | 71111  | Г        | 105      |           |  |  | _  |          |          |                | T        |          |
| 6        | 6        | 1              |          | $\top$    | $\top$   | 一  |                 | $\neg \vdash$  |           |          | 56       | П        | $\neg$   | 寸        | 寸        |          | ┪        | 十        | +      | 7      | $\vdash$ | 106      |           | T  | Г  | Т  | П        |          | ┪              | $\neg$   |          |
| 7        | 7        |                |          | $\top$    | $\top$   | T  |                 | $\neg$         | _         |          | 57       | H        | $\neg$   | 1        | 寸        | 寸        | T        | 十        | _      | 7      |          | 107      | 1         | 1  |  |  | П        |          |                | ╗        | 7        |
| 8        | 8        | 11/1           | $\neg$   | $\top$    | +  | $\vdash$   | H               | $\neg$         | _         |          | 58       |          | $\neg$   | 一        | 寸        | $\neg$   | 十        | _        |        | 7      |          | 108      |           |  | T  |  |          |          | 一              | $\dashv$ |          |
| 9        | 9        | ~              | _        |           | 1  | T  | $\Box$          | 十              | $\exists$ |          | 59       | П        |          | _        |          | $\dashv$ | T        | 1        | $\top$ | 7      |          | 109      | _         | <del>                                     </del> | $\vdash$   |  |          |          | $\neg$         |          | _        |
| 10       | 10       | 5              | $\dashv$ | +         | T  | $\Box$   | $\Box$          | $\dashv$       | 1         |          | 60       | H        | 十        | 7        | 7        | 十        | $\top$   | +        | $\top$ | 7      |          | 110      |           |  |  | 1  | П        |          | 7              | $\dashv$ | $\neg$   |
| 11       | 11       | 11111          | +        | $\top$    |  | $I^-$  | H               | 十              | 7         |          | 61       | H        | $\dashv$ | 7        | 1        | 十        | _        | +        | $\top$ | 7      |          | 111      | $\top$    | 1  | $\vdash$   |  | М        | $\neg$   | 寸              | _        | $\neg$   |
| 12       | 12       | 3              | $\dashv$ | $\top$    | T  | $\Box$   |                 | $\dashv$       | 7         |          | 62       | Н        | 十        | $\dashv$ | 寸        | $\dashv$ | $\top$   | +        | _      | ۱      |          | 112      |           | T  | 1  | 1  | П        |          | 7              | _        | $\neg$   |
| 13       | 13       | 3              | $\top$   | +         | +  | $\vdash$   |                 | +              | $\neg$    |          | 63       | Н        | $\dashv$ | 7        | 寸        | $\dashv$ | 十        | 十        | +      | ۱      |          | 113      | $\top$    | T  | T  | T  | М        | $\neg$   | 7              | $\neg$   | $\neg$   |
| 14       | 14       |                | $\dashv$ | +         | +  | $\vdash$   | $\vdash$        | $\dashv$       | $\dashv$  |          | 64       | $\vdash$ | $\dashv$ | 7        | 一        | $\dashv$ | $\dashv$ | $\top$   | +      | ۱      | $\vdash$ | 114      | $\top$    | T  |  |  | Н        |          | -              | $\neg$   | $\neg$   |
| 15       | 15       | 3              | +        | +         | +  |  | $\vdash$        | $\dashv$       | $\dashv$  |          | 65       | $\vdash$ | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ | +        | +      | ۱      |          | 115      | $\top$    | T  | <del>                                     </del> | T  | Н        | $\dashv$ | 一              | $\dashv$ | $\neg$   |
| 16       | 16       | 11 11 11 11 11 | _        | +         | +  | $\vdash$   | $\vdash$        | $\dashv$       | $\dashv$  | $\vdash$ | 66       | $\vdash$ | $\dashv$ | ┪        | 一        | $\dashv$ | $\dashv$ | +        | $\top$ | 1      |          | 116      | $\top$    | †  | $\vdash$   | <b>T</b>   | H        |          | 寸              | 一        | $\neg$   |
| 17       | 17       | =              | $\top$   | $\top$    |  | $\vdash$   | $\vdash$        | 十              | $\dashv$  |          | 67       | $\vdash$ | 十        | 7        | 寸        | $\dashv$ | 十        | +        | $\top$ | 1      |          | 117      | +         | 1-   | Т  | T  | Н        |          | $\dashv$       | $\dashv$ | $\dashv$ |
| 18       | 18       | Ξ              | $\dashv$ | $\dagger$ |  |  | H               | $\dashv$       | $\dashv$  |          | 68       | $\vdash$ | $\dashv$ | 7        | 寸        | $\dashv$ | T        | +        | +      | ۱      |          | 118      |           | T  | <del>                                     </del> | $\vdash$   | H        |          | $\dashv$       | $\dashv$ | $\dashv$ |
| 19       | 19       | Ξ              | -+       | +         | +  |  | $\vdash$        | $\dashv$       | $\dashv$  |          | 69       | $\vdash$ | $\dashv$ | +        | _        | $\top$   | $\top$   | $\top$   | $\top$ |        |          | 119      | 1         | $t^-$  | Т  | $\vdash$   |          | $\vdash$ | 寸              | 一        | $\dashv$ |
| 20       | 20       | 탈              | $\dashv$ | +         | +  |  | $\vdash$        | $\dashv$       | $\dashv$  | $\vdash$ | 70       | $\vdash$ | $\dashv$ | +        | _        | 十        | +        | +        | $\top$ | ۱      |          | 120      | $\dagger$ | $\vdash$   | Т  | T  | Н        | $\dashv$ | 一              |          | $\dashv$ |
| 21       | 21       | 11             |          | +-        | +  | $\vdash$   | $\vdash$        | +              | $\dashv$  |          | 71       | $\vdash$ | $\dashv$ | ┪        |          | $\dashv$ | +        | +        | +      | ┪      | $\vdash$ | 121      | +         | +-   | <del>                                     </del> | t  | $\vdash$ | $\dashv$ | 一              |          | $\dashv$ |
| 22       | 22       |                | 十        | +         | +-   | $\vdash$   | $\vdash \vdash$ | $\dashv$       | $\dashv$  |          | 72       | $\vdash$ | $\dashv$ | $\dashv$ | _        | 十        | +        | +        | $\top$ | - ا    | -        | 122      | +         | $\dagger$  | $\vdash$   |  | $\vdash$ | Н        | _              | 一        | $\dashv$ |
|          | 23       | ~              | +        | +         | +  | $\vdash$   | $\vdash$        | $\dashv$       | $\dashv$  | $\vdash$ | 73       | H        | $\dashv$ | $\dashv$ | -        | 十        | +        | +        | $\top$ | - ا    |          | 123      |           | $\vdash$   | Т  | 一  | Н        | $\dashv$ | 一十             | $\dashv$ | $\dashv$ |
|          | 24       | $\vdash$       | +        | +         | +  | $\vdash$   | $\vdash$        | $\dashv$       | $\dashv$  | $\vdash$ | 74       | $\vdash$ | $\dashv$ | +        | $\dashv$ |          | +        | +        | $\top$ | ۱      | $\vdash$ | 124      | +         | 1  | $\vdash$   | <del>                                     </del> | H        | $\dashv$ | 7              | -        | $\dashv$ |
| _        | 25       | Н              |          | +         | +  | $\vdash$   | $\vdash$        | $\dashv$       | $\dashv$  |          | 75       |          | $\dashv$ | $\dashv$ | $\dashv$ | 十        | $^{+}$   | +        | ╅      | - :::: |          | 125      |           | ╁  | $\vdash$   | $\vdash$   | Н        |          | _              | 寸        | ᅥ        |
|          | 26       |                | _        | +         | 1  | $\vdash$   |                 | -              | $\dashv$  |          | 76       | H        | 十        | 十        | _        | 十        | $\dashv$ | +        | ╈      |        |          | 126      |           | <del>                                     </del> |  |  | П        | $\neg$   | _              | _        | ᅦ        |
|          | 27       | $\vdash$       | _        | +         |  | T  | -               |                | $\dashv$  |          | 77       | Н        | $\dashv$ | 寸        | $\dashv$ | $\dashv$ | ╅        | 十        | +      | ⊣:::   |          | 127      | 1         | T  |  |  | т        |          | $\dashv$       | 7        | $\dashv$ |
|          | 28       |                | $\vdash$ | 十         | +  | $\vdash$   |                 | $\neg$         | $\exists$ |          | 78       | $\Box$   | $\neg$   | 寸        | $\dashv$ | $\dashv$ | 十        | ┪        | 1      | 7      |          | 128      |           | 1  | $\vdash$   |  | П        |          |                |          | ╗        |
|          | 29       | Н              | $\top$   | ╅╴        | $\top$   | $\vdash$   |                 | _              | 7         |          | 79       | H        | $\dashv$ | 7        | T        | 寸        | 十        | 十        | 十      | 7      |          | 129      | 1         | T  | $\vdash$   | T  | П        |          | ヿ              | 寸        | $\neg$   |
| $\vdash$ | 30       |                | _        | $\top$    | +  | <del>                                     </del> |                 | 一              | 1         |          | 80       | H        | $\dashv$ | _        |          | $\dashv$ | ╅        | 十        | ╅      | ٦      |          | 130      | 1         | 1  |  | $\vdash$   | П        |          | $\dashv$       | $\neg$   | $\neg$   |
|          | 31       |                | $\neg$   | $\top$    | $\vdash$   | $\vdash$   |                 | $\neg$         | $\exists$ |          | 81       | П        | $\neg$   | _        | _        | _        | $\neg$   | +        | _      | 7      |          | 131      | 1         | 1  | $\vdash$   |  |          |          | 寸              | 一        | ┪        |
|          | 32       | Н              | $\dashv$ | +         | +  | П  | $\Box$          | $\dashv$       | $\dashv$  |          | 82       | H        | $\dashv$ | 7        | _        | $\dashv$ | $\dashv$ | +        | $\top$ | ٦      |          | 132      | 1         | T  | Г  |  | Н        |          | $\dashv$       | +        |          |
|          | 33       | $\sqcap$       | _        | $\top$    | $\top$   | П  | П               | $\dashv$       | $\dashv$  |          | 83       | $\Box$   | 十        | 7        | 寸        | 十        | $\top$   | $\top$   | T      | ٦      |          | 133      | 1         | †  | $\vdash$   | $\vdash$   | П        | $\neg$   | $\dashv$       |          | _        |
|          | 34       | П              | $\neg$   | 1         | 1  | $\vdash$   | $\vdash$        | 寸              | 7         |          | 84       |          | 十        | 寸        | 7        | $\dashv$ | $\top$   | 1        | 1      | 7      |          | 134      | 1         | $\top$   | Г  |  | П        |          | $\dashv$       | 7        | $\neg$   |
|          | 35       | H              | $\dashv$ | 1         | 1  | П  | П               | $\dashv$       | 7         |          | 85       | $\vdash$ | $\dashv$ | $\dashv$ | 7        | 十        | $\top$   | _        | +      | 7      |          | 135      | 1         | 1  |  |  | П        |          |                | $\dashv$ | $\neg$   |
|          | 36       | $\Box$         | -†-      | $\top$    | T  | $\vdash$   | $\Box$          | $\dashv$       | 7         |          | 86       | $\vdash$ | 一十       | 7        | $\dashv$ | 十        | $\top$   | $\top$   | $\top$ | 7      |          | 136      |           | 1  | Т  | Т  | П        |          | _              | _        | $\dashv$ |
|          | 37       |                | +        | $\top$    | +  | $\vdash$   | $\vdash$        | $\dashv$       | $\dashv$  |          | 87       | H        | 十        | 7        | $\dashv$ | $\dashv$ | $\top$   | $\top$   | 1      | 7      |          | 137      | 1         | 1  | Г  | Т  | П        |          | 寸              | $\dashv$ | $\dashv$ |
|          | 38       | $\Box$         | $\dashv$ | $\top$    | +-   | $\vdash$   | $\sqcap$        | $\dashv$       | 7         |          | 88       | $\Box$   | 十        | $\dashv$ | 7        | 十        | _        | $\dashv$ | 1      | 7      |          | 138      |           | T  |  | Г  | П        |          | $\dashv$       | _        | $\neg$   |
|          | 39       | H              | $\dashv$ | 1         | 1  |  | $\vdash$        | 一              | $\dashv$  |          | 89       | М        | $\dashv$ | $\dashv$ | _        | $\dashv$ | $\top$   | $\top$   | 1      | ٦      |          | 139      | 1         |  | Г  |  | П        |          | 寸              | 寸        | $\neg$   |
|          | 40       | H              | $\dashv$ | $\top$    | 1  | $\vdash$   | $\Box$          | _              | $\dashv$  |          | 90       | П        | 十        | 寸        | $\dashv$ | $\dashv$ | $\top$   | +        | 1      | 7      |          | 140      | 1         | $\top$   |  |  | П        |          | 寸              | _        | $\dashv$ |
|          | 41       | $\vdash$       | $\dashv$ | $\top$    | <del>                                     </del> | <b>—</b>   |                 | $\dashv$       | 7         |          | 91       | П        | 十        | 7        | 7        | 十        | $\dashv$ | +        | 1      | 7      |          | 14.1     |           |  |  |  | П        |          | 7              | 1        | $\neg$   |
|          | 42       | $\vdash$       | $\dashv$ | 1         | †  | Т  | $\Box$          | $\dashv$       | $\dashv$  | $\vdash$ | 92       | П        | 十        | $\dashv$ | _        | 十        | $\top$   | $\top$   | T      | 7      |          | 142      |           | T  | Г  | Г  | П        | $\Box$   | 一              | $\dashv$ | $\neg$   |
|          | 43       | $\vdash$       | $\dashv$ | +-        | T  | П  | H               | $\neg \dagger$ | $\dashv$  |          | 93       |          | 十        | $\dashv$ | 寸        | $\dashv$ | _        | _        |        | 7      |          | 143      | 1         |  |  | T  | П        |          | 一              | $\dashv$ | $\dashv$ |
|          | 44       | $\vdash$       | +        | $\top$    |  |  | $\vdash$        | $\dashv$       | _         |          | 94       | П        | 十        | $\dashv$ | _†       | $\dashv$ | $\top$   | $\top$   | 1      | 7111   |          | 144      |           | 1  | T  | Т  | П        |          | $\dashv$       | $\dashv$ | $\dashv$ |
|          | 45       | П              | $\neg$   | $\top$    | $\top$   | $\Box$   | $\Box$          | 一              | ٦         |          | 95       |          | $\dashv$ | ┪        | 1        | T        | T        | $\top$   | T      | 7      | $\Box$   | 145      |           | 1  | Г  | Г  | П        |          | $\neg$         | 1        | $\dashv$ |
|          | 46       | H              | 十        | $\top$    | +  | $\vdash$   | $\vdash$        | $\dashv$       | $\dashv$  |          | 96       | $\Box$   | $\dashv$ | 7        | 7        | $\dashv$ | $\top$   | +        | 十      | 1      |          | 146      |           | 1  | Г  |  | П        | Н        | 7              | 1        | $\dashv$ |
|          | 47       | П              | 十        | +         | $\top$   | П  | $\Box$          | $\dashv$       | $\dashv$  |          | 97       | $\Box$   | $\dashv$ | 7        | 寸        |          | $\top$   | $\top$   | T      | 7      |          | 147      | 1         | T  |  |  |          |          | 寸              | $\neg$   | $\neg$   |
|          | 48       | H              | $\dashv$ | +         | 1  | $\vdash$   | $\vdash$        | $\dashv$       | 7         |          | 98       | П        | 寸        | 7        | $\dashv$ | $\dashv$ | $\top$   | +        | $\top$ | 7      |          | 148      |           | T  | Г  | Г  | П        |          | 7              | _        | $\dashv$ |
|          | 49       | H              | $\dashv$ | +         |  | П  | $\Box$          | $\neg$ †       | 7         |          | 99       | П        | 寸        | 寸        | 寸        | $\top$   | 十        | $\top$   | T      | 7      | Г        | 149      | 1         | Τ  | Г  |  |          |          | $\neg$         | $\neg$   | $\neg$   |
|          | 50       | Н              | 十        | ┪         |  | П  | H               | $\dashv$       |           |          | 100      | П        | 十        | 7        | $\dashv$ | T        | 十        | 十        | T      | 7      |          | 150      |           |  |  |  | П        |          | $\neg \dagger$ | $\dashv$ | $\dashv$ |
|          |          |                |          |           |  |  |                 |                |           | <br>     |          |          |          |          |          |          |          |          |        |        |          |          |           | _  | _  | _  |          |          |                |          | _        |